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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,937	12/10/2003	Peter Maurits Maria Van Geert	CM1976C	6673

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EXAMINER

MAYES, MELVIN C

ART UNIT PAPER NUMBER

1734

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/731,937

Applicant(s)

VAN GEERT ET AL.

Examiner

Melvin Curtis Mayes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1 and 4 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

(1)

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 7, 2005 has been entered.

Claim Rejections - 35 USC § 112

(2)

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

(3)

Claims 1 and 4 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for primer comprising acrylic compounds, does not reasonably provide enablement for primer which consists of acrylic compound. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

According to the specification, the primer comprises acrylic compounds (pg. 4, line 30). There is no support for a primer which consists of acrylic compounds as now claimed.

Claim Rejections - 35 USC § 103

(4)

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

(5)

Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of WO 93/08084, JP 60-28459 Abstract, Yamaguchi et al. 5,200,253, Catena et al. 5,658,968 and Culbertson et al. 4,571,363.

The admitted prior discloses that a typical holographic film structure for packaging comprises an organic solvent based lacquer applied to a polyester (PET) film, the lacquer embossed, a metallic layer, typically aluminum, applied to the embossed lacquer, the polyester film laminated to other films and the structure printed (pg. 1-2). The admitted prior art does not disclose that the organic solvent based lacquer is acrylic based applied with toluene, butyl acetate or ketone solvent or disclose printing the metallic layer by first applying a water based primer of acrylic compounds then an organic solvent based ink of colored ink having ethanol as a solvent and white ink having ethyl acetate as a solvent.

WO 93/08084 teaches that in making packaging material with holographic pattern by embossing a thermoplastic layer formed on a plastic film substrate, the thermoplastic layer may comprise an acrylic which softens and can be embossed under light pressure and can applied as a solvent-based lacquer using solvent free of toluene or methylethylketone and a suitable solvent such as ethylacetate or with a solvent such that after drying the thermoplastic layer contains no more than 10 mg per square meter of retained toluene or methylethylketone. WO 93/08084

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further teaches that printing is applied to the aluminum film applied to the embossed thermoplastic layer and teaches that the printing is protected by a layer of varnish (pgs. 1-5).

JP 60-28459 Abstract (JP '459) teaches that solvents for acrylic lacquer include ethyl acetate and butyl acetate as well as toluene and methylethyl ketone).

Yamaguchi et al. teaches that for holographic sheet used for packaging and provided with a reflecting layer of aluminum, printing and protective varnish layer, a primer layer of lacquer is provided between the reflecting metal layer and the protective layer (varnish layer) to insure better adhesion therebetween. The ink layer (printing) may be provided on the surface of the primer layer (col. 18, lines 4-17).

Catena et al. teach that solvent-borne flexible packaging printing inks are widely used to print a wide variety of substrates such as plastic films and aluminum foils because they offer economy, versatility, quality and simplicity. Catena et al. teach printers and packagers prefer water-borne primers and teach that the ink should be formulated to have increased water-borne primer compatibility. Catena et al. teach that solvents for the printing ink can be selected from alkanols such as ethanol, acetates such as ethyl acetate or mixtures thereof (col. 1, lines 10-50, col. 2, lines 57-61, col. 3, lines 24-31).

Culbertson et al. teach that a primer for such use as for packaging material for improved adhesion to organic solvent based inks comprises an aqueous dispersion of acrylic component and acrylate comonomer (col. 3, lines 12-68, col. 6, lines 45-52).

It would have been obvious to one of ordinary skill in the art to have modified the method of the admitted prior art for making a holographic film structure for packaging by providing the organic solvent based lacquer on the polyester film as an acrylic lacquer, as taught

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by WO '084, as a solvent-based lacquer that can be applied to a plastic film substrate for subsequent embossing to make packaging material having a holographic pattern, the thermoplastic acrylic enabling embossing under light pressure. The use of an organic solvent-based acrylic lacquer in the method of the admitted prior art would have been obvious to one of ordinary skill in the art, as taught by WO '084, as a lacquer applied to a substrate for embossing for making packaging material with holographic pattern.

Providing the organic solvent for the acrylic lacquer as butyl acetate would have been obvious to one of ordinary skill in the art, as WO '084 teaches that solvents such as ethyl acetate are suitable and JP '459 teaches that solvents for acrylic lacquer include ethyl acetate and butyl acetate. The use of butyl acetate instead of ethyl acetate would have been obvious to one of ordinary skill in the art as an acetate solvent that can be used for acrylic lacquer. Further, using toluene or methylethyleketone (a ketone) as the solvent would have been obvious to one of ordinary skill in the art, as WO '084 suggests that these solvents can be used so long as after drying, the thermoplastic layer contains no more than 10 mg per square meter of retained toluene or methylethylketone.

It would have been obvious to one of ordinary skill in the art to have further modified the method of the admitted prior art for making packaging material with holographic film structure by applying printing and a protective varnish layer to the aluminum layer, as taught by WO '084, as applied to the aluminum film when making holographic packaging material.

Providing a primer lacquer layer on the aluminum layer before applying the printing and protective varnish would have been obvious to one of ordinary skill in the art, as taught by Yamaguchi et al, to insure better adhesion between the aluminum layer and the protective

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varnish of the holographic sheeting used for packaging, and as taught by Culbertson et al., to improve adhesion to ink.

It would have been obvious to one of ordinary skill in the art to have further provided the primer lacquer layer for improved adhesion to ink of a water solvent-based lacquer primer, as taught by Catena et al., as preferred by printers and packagers, and to have printed the primer with an organic solvent based packaging ink, as taught by Catena et al., as widely used to print a wide variety of substrates such as plastic films and aluminum foils because they offer economy, versatility, quality and simplicity. By applying a water based lacquer primer to the aluminum film for better adhesion of the protective varnish and ink as suggested by Yamaguchi et al. and Culbertson et al., by providing the lacquer primer as water-based as preferred by printers and packagers as taught by Catena et al., and by providing the printing of a solvent-based ink as suggested by Catena et al, the references suggest making holographic packaging including the steps of applying a water solvent-based primer and organic solvent-based printing ink onto a aluminum layer of holographic packaging, as claimed.

It would have been obvious to one of ordinary skill in the art to have even further modified the method of the references as combined by providing the water-solvent based primer as an acrylic primer of acrylic component and acrylate comonomer (acrylic compounds), as taught by Culbertson et al., as primer used for packaging material for improved adhesion to organic solvent based inks.

It would have been obvious to one of ordinary skill in the art to have further modified the method of the admitted prior art by providing the white and colored solvent based inks for

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printing as each comprising ethanol and ethyl acetate, as Catena et al. teach that solvent for printing ink can be a mixture of an alkanol such as ethanol and an acetate such as ethyl acetate.

Response to Arguments

(6)

Applicant's arguments filed December 7, 2005 have been fully considered but they are not persuasive.

Applicant argues that Applicants have discovered that organic solvent from ink can pass through pinholes in the aluminum layer, an unsuspected problem, and the use of water-borne primer to solve this problem would not be obvious.

(7)

In response to applicant's argument that Applicants have recognized an unsuspected problem and a remedy to the problem, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

In this case, the prior art of record suggests to provide primer to not only insure better adhesion between the aluminum layer and protective varnish of the packaging, as suggested by Yamaguchi et al., but also to improve adhesion to ink, as suggested by Culbertson et al. Although the discovery of the cause of a problem should be considered in determining obviousness, the prior art of record clearly suggests providing primer on the aluminum layer, albeit for different reasons. The reason or motivation to modify a reference may suggest what

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Applicant has done, but for a different purpose or to solve a different problem. It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by Applicant (see MPEP 2144).


Conclusion

(8)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin Curtis Mayes whose telephone number is 571-272-1234. The examiner can normally be reached on Mon-Fri 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on 571-272-1187. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Melvin Curtis Mayes
Primary Examiner
Art Unit 1734

MCM
February 16, 2006